TCEQ Air Monitoring Van Data ITC Fire – March 2019

TCEQ Ambient Monitoring staff began conducting monitoring in the area of the Deer Park fire at Intercontinental Terminals Company on Monday, March 18, 2019. Monitoring vans contain multiple analyzers used to measure hydrogen sulfide (H₂S), sulfur dioxide (SO₂), and 17 volatile organic compounds (VOCs) at part per billion (ppb) levels. A toxic vapor analyzer was also used to survey for sampling locations. This instrument provides instantaneous readings for non-speciated part per million (ppm) level VOCs.

A summary of preliminary sample results from the TCEQ's monitoring van equipment are listed below. Monitoring efforts continue and additional results will be updated as available. The TCEQ Toxicology Division has reviewed these preliminary data and indicated that the observed levels do not present an immediate health concern. Please note that these preliminary data have not been verified by the TCEQ and may change. The data are not official until validated by technical staff.

Monday, March 18, 2019

Location	Time (Approx.)	Instrument	Parameters	Results (ppb)	Detection Limit (ppb)
Richmond Avenue and Sage Street	10:50 PM - 11:45 PM	Ultraviolet Fluorescence Analyzer	SO_2	5.47 - 5.78	0.4
	7:35 PM - 11:55 PM	Cavity Ring Down Spectrometer	H ₂ S	2.63 – 3.68 (5-minute average) 2.88 – 3.19 (30-minute average)	3
	2:39 PM - 11:39 PM	Real-Time Gas Chromatograph	VOCs	0.0 - 8.7 (m+p xylene, detection limit 9) 0.0 - 13 (o-xylene, detection limit 3.3) No other VOCs were detected	Varies, see results column

H₂S - hydrogen sulfide ppb - parts per billion

SO₂ - sulfur dioxide

VOCs - volatile organic compounds

Tuesday, March 19, 2019

Location	Time	Instrument	Parameters	Results (ppb)	Detection
	(Approx.)				Limit (ppb)
Richmond Avenue and Sage Street	12:00 AM - 7:00 PM	Ultraviolet Fluorescence Analyzer	SO ₂	5.78 - 10.4	0.4
	12:00 AM - 6:05 PM	Cavity Ring Down Spectrometer	H ₂ S	2.66 – 4.62 (5-minute average) 2.89 – 4.21 (30-minute average)	3
	12:02 AM - 4:45 PM	Real-Time Gas Chromatograph	VOCs	0.0 - 14 (acetylene, detection limit 3.5) 0.0 - 35 (propane, detection limit 4.3) 0.0 - 86 (n-butane, detection limit 3.6) 0.0 - 37 (1-butene, detection limit 2.6) 0.0 - 140 (1,3-butadiene, detection limit 2.5) 0.0 - 12 (hexane + cyclohexane, detection limit 5.8) 0.0 - 22 (ethylbenzene, detection limit 4.7) 0.0 - 11 (styrene, detection limit 6.3) 0.0 - 28 (m+p xylene, detection limit 9) 0.0 - 16 (o-xylene, detection limit 3.3) No other VOCs were detected	Varies, see results column
7728 Lockwood Drive	8:00 PM - 11:45 PM	Ultraviolet Fluorescence Analyzer	SO_2	8.89 - 12.6	0.4
	11:50 PM - 11:55 PM	Cavity Ring Down Spectrometer	H ₂ S	3.10 - 3.20 (5-minute average)	3
	7:48 PM - 11:37 PM	Real-Time Gas Chromatograph	VOCs	31 – 240 (propane, detection limit 4.3) 0.0 – 17 (n-butane, detection limit 3.6) 0.0 – 7.4 (1,3-butadiene, detection limit 2.5) 0.0 – 5.9 (m+p xylene, detection limit 9)	Varies, see results column

H₂S - hydrogen sulfide ppb - parts per billion SO₂ - sulfur dioxide VOCs - volatile organic compounds